401673

15/OCT/93

FIELD TRIP REPORT FOR LEVEL 3 SITE INSPECTION PRIORITIZATION

OF

BISHOP TUBE COMPANY SITE FRAZER, CHESTER COUNTY, PENNSYLVANIA

PREPARED UNDER

ARCS CONTRACT NUMBER 68-W8-0092

WORK ASSIGNMENT NUMBER 92-31-3JZZ

CERCLIS NUMBER PAD081868309

USEPA DSN PA-0568

FOR THE

HAZARDOUS WASTE MANAGEMENT DIVISION

U.S. ENVIRONMENTAL PROTECTION AGENCY

SUBMITTED BY	REVIEWED BY	APPROVED BY
(b) (4) [redacted]	(b) (4) [redacted]	(b) (4) [redacted]
Environmental Scientist	Project Manager	Program Director

TCN 4231-10

TABLE OF CONTENTS

1.0 FIELD TRIP REPORT

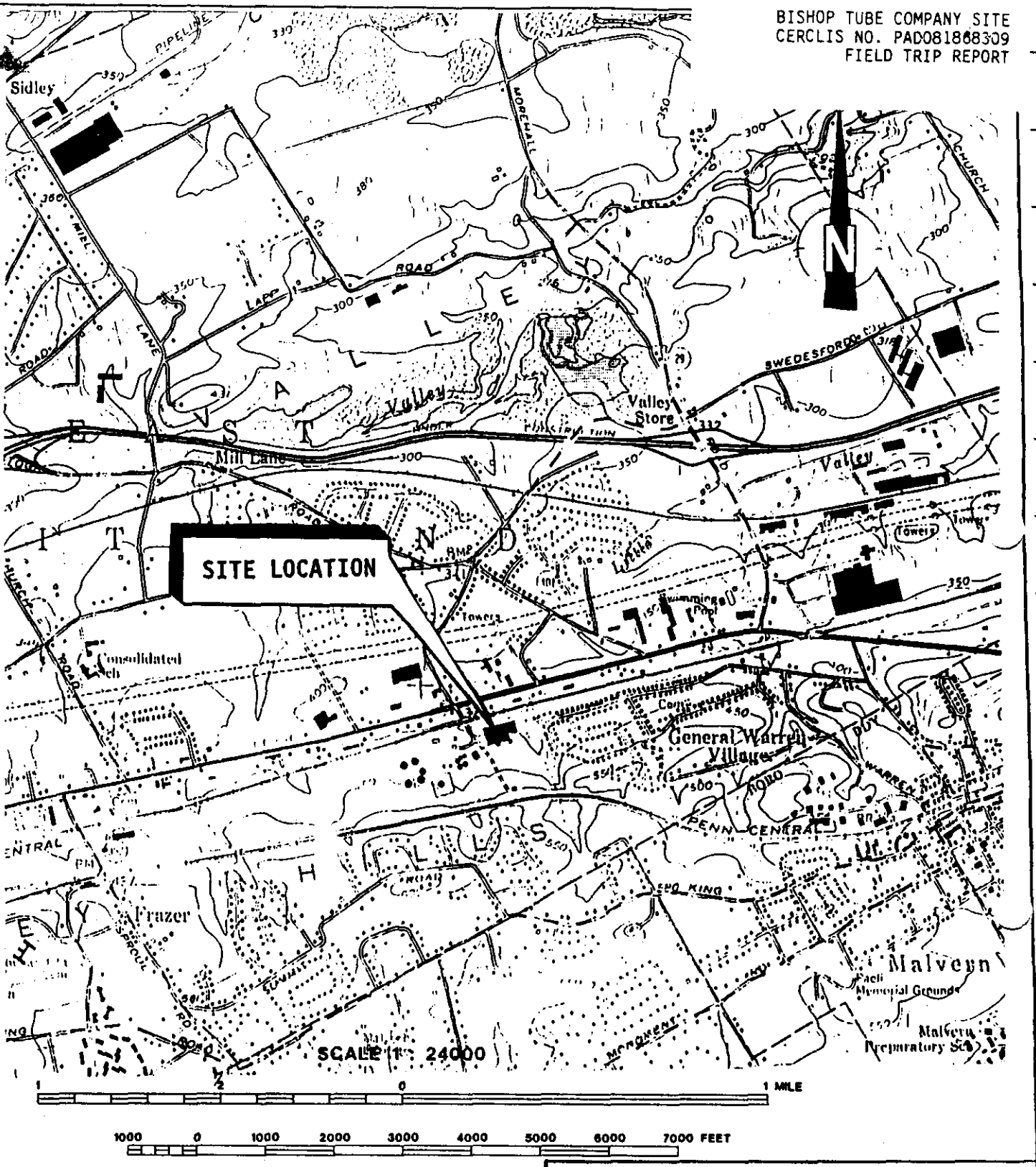
1.1 Summary

On Wednesday, June 23, 1993, Tetra Tech, Incorporated personnel (b) (4) [redacted], conducted sampling for a Level 3 Site Inspection Prioritization (SIP) of the Bishop Tube Company site in Frazer, Chester County, Pennsylvania (Figure 1 and Figure 2). Site access was granted by Mr. Russell Levering, Damascus-Bishop Tube Company. The sampling team was accompanied by Mr. Bruce R. Cushing, P.G. of BCM Engineers, who collected split samples on behalf of Christiana Metals, the property owner. The weather at the time of the site visit was cool and sunny with temperatures in the 60° F.

A total of four (4) low-concentration solid samples, nine (9) aqueous low-concentration environmental samples, and two (2) quality assurance/quality control samples were collected. Samples are listed on Table 1. Well Sampling Log Sheets are included as Attachment 1. Samples were submitted through USEPA's Contract Laboratory Program (CLP) to be analyzed for volatile organic compounds on USEPA's Target Compound List, and metals and cyanide on USEPA's Target Analyte List. In addition, ground water samples from the monitoring wells were filtered and submitted for dissolved metals analysis. As per the task work plan approved by USEPA, samples were not submitted for organic semi-volatile, pesticides, or polychlorinated biphenyls (PCBs) analyses. Sample locations are shown on Figure 3. QA/QC samples included a field blank, a trip blank, a duplicate solid sample, a duplicate aqueous sample. In addition, extra volume for one solid sample and one aqueous sample, was sent to the laboratory for samples designated as matrix spike/matrix spike duplicate (MS/MSD) samples.

The USEPA sample shipping log and chain of custody forms are included as Attachment 2.

There were no deviations from the task work plan.



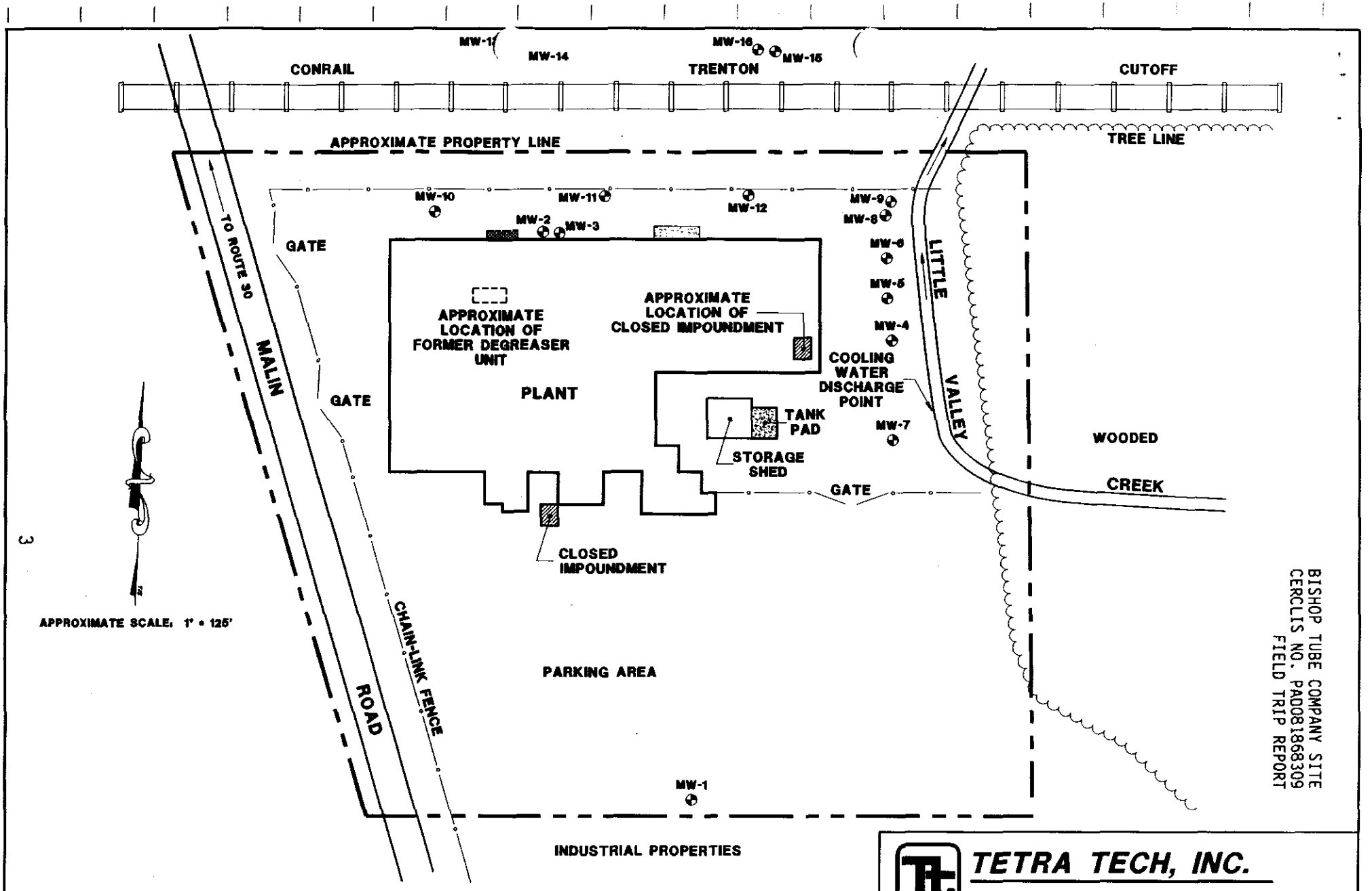
SOURCE: USGS TOPOGRAPHIC MAPS,
MALVERN, PENNSYLVANIA QUADRANGLE

QUADRANGLE LOCATION

TETRA TECH, INC.

FIGURE 1
SITE LOCATION MAP
BISHOP TUBE COMPANY SITE
FRAZER, CHESTER CO., PA

FILENAME: 0000000



3

BISHOP TUBE COMPANY SITE
CERCLIS NO. PAD081868309
FIELD TRIP REPORT

TETRA TECH, INC.

FIGURE 2

SITE SKETCH
BISHOP TUBE COMPANY
FRAZER, CHESTER COUNTY
PENNSYLVANIA

ORIGINAL (Red)

BISHOP.DWG

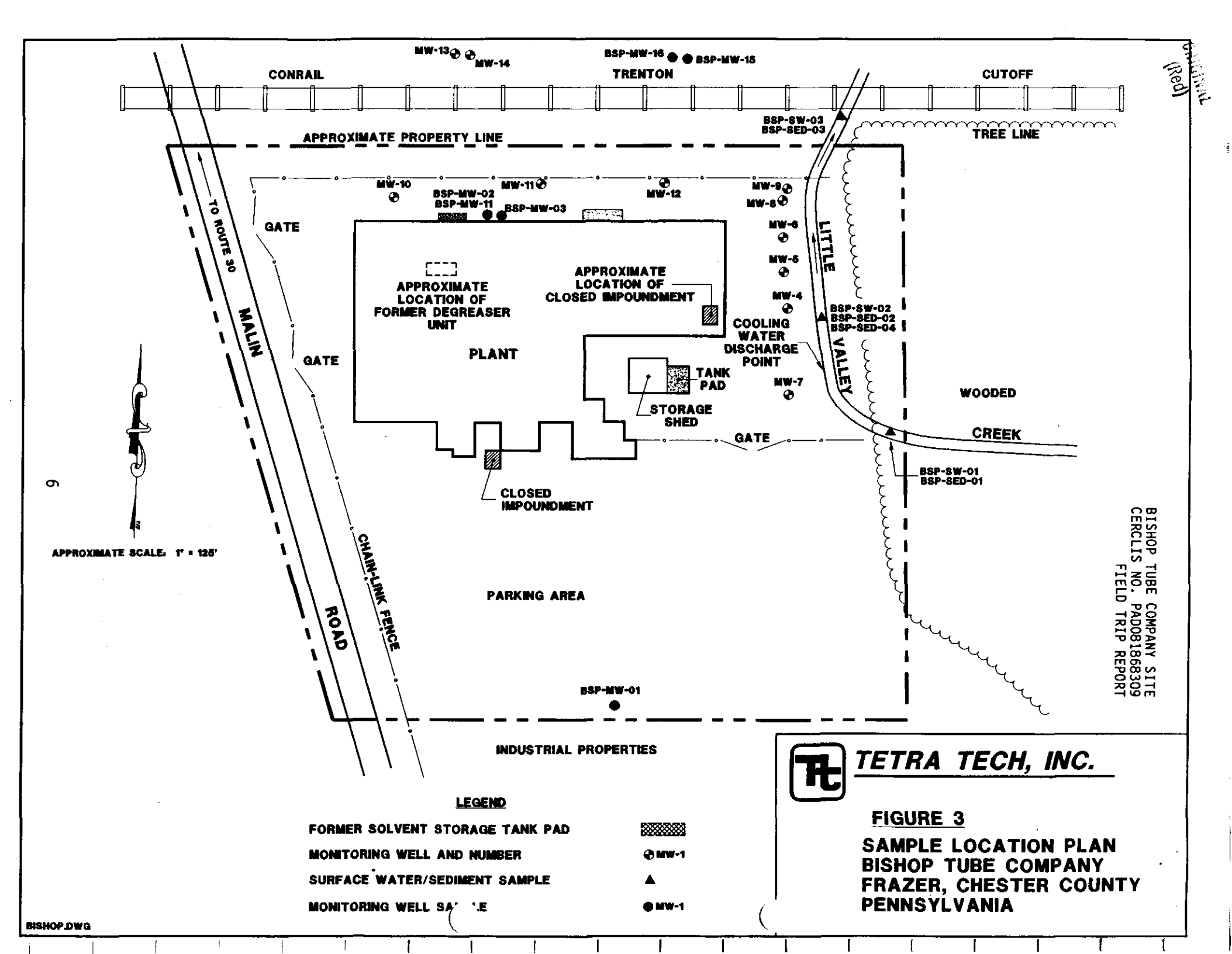
Table 1. Sampling Summary for Bishop Tube Company Site (Sheet 1 of 2)

Organic CLP#	Inorganic CLP#	Dissolved Metals CLP#	Sample Designation	Matrix	Sample Location	Sample Description	Field Measurements
CNA97	----------	----------	BSP-TB-01	AQUEOUS	TRIP BLANK	----------	----------
CNA60	MCLF60	MCLF98	BSP-FB-01	AQUEOUS	FIELD BLANK	----------	----------
CNA51	MCLF51	MCLF46	BSP-MW-01	AQUEOUS	Bishop Tube Co. monitoring well 01; background well located appoximately 300 feet south of plant building.	Clear, Odorless	Temp: 12.0 C Cond: .087 pH: 6.11
CNA55	MCLF55	MCLF50	BSP-MW-15	AQUEOUS	Bishop Tube Co. monitoring well 15; approximately 200 feet north of plant building (off site).	Clear, Odorless	Temp: 13.0 Cond: 3.59 pH: 7.14
CNA56	MCLF56	MCLF99	BSP-MW-16	AQUEOUS	Bishop Tube Co. monitoring well 16; paired with monitoring well 15.	Clear, Odorless	Temp: 13.8 Cond: not taken pH: 7.26
CNA52	MCLF52	MCLF47	BSP-MW-02	AQUEOUS	Bishop Tube Co. monitoring well 02; on-site well located in former TCE tank area adjacent to northern side of building.	Clear, Odorless	Temp: 15.9 Cond: 0.467 pH: 7.13 PID reading: 2.8 ppm
CNA54	MCLF54	MCLF49	BSP-MW-21	AQUEOUS	Duplicate of BSP-MW-02	See above	see above
CNA53	MCLF53	MCLF48	BSP-MW-03	AQUEOUS	Bishop Tube Co. monitoring well 03; paired with MW-02	Clear, Odorless	Temp: 17.6 Cond: not taken pH: 7.40
CNA58	MCLF58	N/A	BSP-SW-03	AQUEOUS	Little Valley Creek downstream of site, approximately 10 feet northeast of site property.	Clear, Odorless	No PID readings above background
CNA63	MCLF63	N/A	BSP-SED-03	SEDIMENT	Same as BSP-SW-03	Brownish-gray silty clay	No PID readings above background
CNA59	MCLF59	N/A	BSP-SW-02	AQUEOUS	Little Valley Creek on site, approximately 30 feet north (downstream) of cooling water outfall	Clear, Odorless	No PID readings above background

Table 1. Sampling Summary for Bishop Tube Company Site (Sheet 2 of 2)

Organic CLP#	Inorganic CLP#	Dissolved Metals CLP#	Sample Designation	Matrix	Sample Location	Sample Description	Field Measurements
CNA62	MCLF62	N/A	BSP-SED-02	SEDIMENT	Same as BSP-SW-02	Brown silty sand small metallic shavings present	No PID readings above background
CNA57	MCLF57	N/A	BSP-SW-01	AQUEOUS	Little Valley Creek in wooded area approximately 25 feet upstream of site property line.	Clear, Odorless	No PID readings above background
CNA61	MCLF61	N/A	BSP-SED-01	SEDIMENT	Same as BSP-SW-01	Brown sandy silt	No PID readings above background

PID = Photo Ionization Detector Cond = Conductivity Temp = Temperature


MW-13
MW-14
BSP-MW-16
BSP-MW-15
CONRAIL
TRENTON
CUTOFF
BSP-SW-03
BSP-SED-03
TREE LINE
APPROXIMATE PROPERTY LINE
MW-10
BSP-MW-02
BSP-MW-11
MW-11
BSP-MW-03
MW-12
MW-9
MW-8
MW-6
MW-5
MW-4
GATE
TO ROUTE 30
MALIN
ROAD
APPROXIMATE LOCATION OF FORMER DEGREASER UNIT
APPROXIMATE LOCATION OF CLOSED IMPOUNDMENT
PLANT
COOLING WATER DISCHARGE POINT
LITTLE
VALLEY
BSP-SW-02
BSP-SED-02
BSP-SED-04
TANK PAD
MW-7
STORAGE SHED
WOODED
CREEK
GATE
BSP-SW-01
BSP-SED-01
CLOSED IMPOUNDMENT
CHAIN-LINK FENCE
PARKING AREA
BSP-MW-01
INDUSTRIAL PROPERTIES
APPROXIMATE SCALE: 1" = 125'
LEGEND
FORMER SOLVENT STORAGE TANK PAD
MONITORING WELL AND NUMBER
MW-1
SURFACE WATER/SEDIMENT SAMPLE
MONITORING WELL SAMPLE
MW-1
TETRA TECH, INC.
FIGURE 3
SAMPLE LOCATION PLAN
BISHOP TUBE COMPANY
FRAZER, CHESTER COUNTY
PENNSYLVANIA
BISHOP TUBE COMPANY SITE
CERCLIS NO. PAD081868309
FIELD TRIP REPORT
BISHOP.DWG

1.2 Persons Contacted

1.2.1 Prior to Field Trip

Mr. Russell G. Levering
Plant Engineer/Buyer
Damascus-Bishop Tube Company
P.O. Box 1189
Route 30 & Malin Road
Frazer, Pennsylvania 19355
(215) 647-3450

Mr. Mike Guiranna
Site Assessment Manager, Region III
USEPA
841 Chestnut Building
Philadelphia, Pennsylvania 19107
(215) 597-3165

Mr. John J. McAleese III
Attorney
Morgan, Lewis & Bockius
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5094

Mr. George Danyliw
Pennsylvania Department of Environmental Resources
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428
(215) 832-6212

1.2.2 At the Site

Mr. Bruce R. Cushing, P.G.
BCM Engineers
One Plymouth Meeting
Plymouth Meeting, PA 19462
(215) 825-3800

Mr. Russell G. Levering
Plant Engineer/Buyer
Damascus-Bishop Tube Company
P.O. Box 1189
Route 30 & Malin Road
Frazer, Pennsylvania 19355
(215) 647-3450

Mr. John J. McAleese III
Attorney
Morgan, Lewis & Bockius
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5094

1.3 Site Observations

- The solvent cleaning system is no longer in use; the above-ground TCE tank has been removed.
- Monitoring Well MW-15 was an artesian well; water began flowing from the top of the casing when the cap was removed.
- Drainage from the site flowed into Little Valley Creek on the eastern side of the site.
- The site was active at the time of the sampling visit.
- The site was approximately 90 percent paved.
- Access to the site was restricted by a chain-link fence.

ATTACHMENT 1.

ORIGINAL (Red)

TETRA TECH, INC.
WELL SAMPLING LOG

SHEET: 1 OF 1

PROJECT: Bishop Tube

PROJECT NO: T4231-10

WELL DESIGNATION: MW-16

DATE: 9/29/93

SAMPLE DESIGNATION: BSP-MW-16

ANALYSES: VOC, Cyanide, and Total & Dissolved Metals

VOLUME OF WATER TO BE REMOVED

(1) Depth to bottom of well (from TOC)	21.90	ft
(2) Depth to water (from TOC)	8.10	ft
(3) Column of water (#1 - #2)	13.80	ft
(4) Casing Diameter	4	in
(5) Volume Conversion (from table)	.653	gal/ft
(6) Volume of Water (#3 x #5)	9.01	gal
(7) Number of volumes to be evacuated	3	
(8) Total volume to be removed (#6 x #7)	27.0	gal
Method of purging (pump, bailer)	pump	

VOLUME CONVERSION:

Casing Diameter	Gallons/Feet
2"	0.163
4"	0.653
6"	1.469
8"	2.611
10"	4.08

FIELD ANALYSES

	START	MID	FINISH
TIME	1141	1155	1156
ORP	68	59	58
pH	7.13	7.23	7.26
CONDUCTIVITY	.402	.420	.439
TEMPERATURE	13.5	14.0	13.8

TOTAL VOLUME PURGED: 30 gal. TIME: 1156

NOTES: 1141 - 2 gpm, water started clear, but changed to a light dark brown color; 1156 - well dry

LOGGED BY: (b) (4) [redacted]

f:\arcs\4231\10\samp1093.log

ORIGINAL
(Red)

TETRA TECH, INC.
WELL SAMPLING LOG

SHEET: 1 OF 1

PROJECT: Bishop Tube

PROJECT NO: T4231-10

WELL DESIGNATION: MW-1

DATE: 9/29/93

SAMPLE DESIGNATION: BSP-MW-1

ANALYSES: VOC, Cyanide, and Total & Dissolved Metals

VOLUME OF WATER TO BE REMOVED

(1) Depth to bottom of well (from TOC)	47.40	ft
(2) Depth to water (from TOC)	16.18	ft
(3) Column of water (#1 - #2)	31.22	ft
(4) Casing Diameter	4	in
(5) Volume Conversion (from table)	.653	gal/ft
(6) Volume of Water (#3 x #5)	20.39	gal
(7) Number of volumes to be evacuated	3	
(8) Total volume to be removed (#6 x #7)	61.17	gal
Method of purging (pump, bailer)	pump	

VOLUME CONVERSION:

Casing Diameter	Gallons/Feet
2"	0.163
4"	0.653
6"	1.469
8"	2.611
10"	4.08

FIELD ANALYSES

	START	MID	FINISH
TIME	0958	1005	1011
ORP	129	123	136
pH	6.07	6.11	6.14
CONDUCTIVITY	.096	.080	.087
TEMPERATURE	11.7	11.8	11.8

TOTAL VOLUME PURGED: 65+ gal. TIME: 1011

NOTES: 0953 - water clear and colorless, purge rate 5 gpm; 1011 - water clear and colorless.

LOGGED BY: (b) (4) [redacted]

f:\arcs\4231\10\samp1093.log

ORIGINAL
(Red)

TETRA TECH, INC.
WELL SAMPLING LOG

SHEET: 1 OF 1

PROJECT: Bishop Tube

PROJECT NO: T4231-10

WELL DESIGNATION: MW-2

DATE: 9/29/93

SAMPLE DESIGNATION: BSP-MW-2

ANALYSES: VOC, Cyanide, and Total & Dissolved Metals

VOLUME OF WATER TO BE REMOVED

(1) Depth to bottom of well (from TOC)	22.95	ft
(2) Depth to water (from TOC)	8.23	ft
(3) Column of water (#1 - #2)	14.72	ft
(4) Casing Diameter	4	in
(5) Volume Conversion (from table)	.653	gal/ft
(6) Volume of Water (#3 x #5)	9.61	gal
(7) Number of volumes to be evacuated	3	
(8) Total volume to be removed (#6 x #7)	28.83	gal
Method of purging (pump, bailer)	pump	

VOLUME CONVERSION:

Casing Diameter	Gallons/Feet
2"	0.163
4"	0.653
6"	1.469
8"	2.611
10"	4.08

FIELD ANALYSES

	START	MID	FINISH
TIME	1517	1522	1527
ORP	08	-57	-66
pH	7.26	7.14	7.13
CONDUCTIVITY	.450	.461	.467
TEMPERATURE	15.4	15.9	15.9

TOTAL VOLUME PURGED: 30 gal. TIME: 1527

NOTES: 1517 - 3 gpm, water is clear light brown.

LOGGED BY: (b) (4) [redacted]

f:\arcs\4231\10\samp1093.log

ORIGINAL
(Red)

TETRA TECH, INC. WELL SAMPLING LOG	SHEET: 1 OF 1
PROJECT: Bishop Tube	PROJECT NO: T4231-10
WELL DESIGNATION: MW-3	DATE: 9/29/93
SAMPLE DESIGNATION: BSP-MW-3	ANALYSES: VOC, Cyanide, and Total & Dissolved Metals

VOLUME OF WATER TO BE REMOVED

(1) Depth to bottom of well (from TOC)	14.00	ft
(2) Depth to water (from TOC)	7.57	ft
(3) Column of water (#1 - #2)	6.43	ft
(4) Casing Diameter	4	in
(5) Volume Conversion (from table)	.653	gal/ft
(6) Volume of Water (#3 x #5)	4.2	gal
(7) Number of volumes to be evacuated	3	
(8) Total volume to be removed (#6 x #7)	12.6	gal
Method of purging (pump, bailer)	pump	

VOLUME CONVERSION:

Casing Diameter	Gallons/Feet
2"	0.163
4"	0.653
6"	1.469
8"	2.611
10"	4.08

FIELD ANALYSES

	START	MID	FINISH
TIME	1600	1612	
ORP	-40	6	
pH	7.56	7.40	
CONDUCTIVITY	.327	-	
TEMPERATURE	17.5	17.6	

TOTAL VOLUME PURGED: 8 gal. TIME: 1612

NOTES: 1600 - 2 gpm; 1602 - dry, 4 gal; 1609 - 1 gpm; 1612 - well dry, 4 gal.

LOGGED BY: (b) (4)

f:\arcs\4231\10\samp1093.log

ORIGINAL (Red)

TETRA TECH, INC.
WELL SAMPLING LOG

SHEET: 1 OF 1

PROJECT: Bishop Tube

PROJECT NO: T4231-10

WELL DESIGNATION: MW-15

DATE: 9/29/93

SAMPLE DESIGNATION: BSP-MW-15

ANALYSES: VOC, Cyanide, and Total & Dissolved Metals

VOLUME OF WATER TO BE REMOVED

(1) Depth to bottom of well (from TOC)	79.45	ft
(2) Depth to water (from TOC)	0.0*	ft
(3) Column of water (#1 - #2)	79.45	ft
(4) Casing Diameter	4	in
(5) Volume Conversion (from table)	.653	gal/ft
(6) Volume of Water (#3 x #5)	51.9	gal
(7) Number of volumes to be evacuated	3	
(8) Total volume to be removed (#6 x #7)	155.6	gal
Method of purging (pump, bailer)	pump	

VOLUME CONVERSION:

Casing Diameter	Gallons/Feet
2"	0.163
4"	0.653
6"	1.469
8"	2.611
10"	4.08

* flowing over top of casing.

FIELD ANALYSES

	START	MID	FINISH
TIME	1236	1249	
ORP	40	-16	
pH	7.19	7.14	
CONDUCTIVITY	.360	.359	
TEMPERATURE	13.4	13.0	

TOTAL VOLUME PURGED: 66 gal. TIME: 1304

NOTES: 1236 - 5 gpm, water is clear and colorless; 1241 - water level dropped to level of pump, well dry, 31 gal; 1253 - well dry, 20 gal. purged; 1301 - started purging; 1304 - well dry, 15 gal; 66 gal. total.

LOGGED BY: (b) (4) [redacted]

f:\arcs\4231\10\samp1093.log

ATTACHMENT 2.

PAGE 1 OF 2
(1)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: BISHOP TUBE CO — EPA PROJ. OFFICER: Mike Giuranna
RAS NO. 20899 — SAS NO: — TASK OR SET NO.
PROJECT SITE LEADER: (b) (4) — PHONE NO. (302) 738-7551
PROJECT SAMPLE COOR — PHONE NO. (302) 738-7551

SAS REQUEST (DETAILS REQUIRED)
(10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC (LOW/ MED/ HIGH)	SAMPLE PHASE (AQ/ SOL)	TYPE OF REQUEST (ORG.DIO OR INOR) SAS)	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	SAS REQUEST: LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIP'D	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
	LOW	AQ	INORG	MCLF51	ETS	9/29/93										
		AQ		MCLF46								X				
		AQ		MCLF52												
		AQ		MCLF47								X				
MS/MSD		AQ		MCLF53												
MS/MSD		AQ		MCLF48								X				
		AQ		MCLF55												
		AQ		MCLF50								X				
		AQ		MCLF56												
		AQ		MCLF99								X				
dup of MCLF52		AQ		MCLF54												
dup of MCLF47		AQ		MCLF49								X				
		AQ		MCLF57												
		AQ		MCLF59												
		AQ		MCLF58												
				MCLF61												
				MCLF62												

FINAL SAMPLING: YES ☑; NO ☐; FINAL SHIPPING DATE: 9/29/93
(14)

REVISION 02/90

(Rad)

PAGE 2 OF 2
(1)

EPA SAMPLE SHIPPING LOG

ORIGINAL (RED)

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: BISHOP TUBE CO EPA PROJ. OFFICER: Mike Giuranna

RAS NO. 20899 SAS NO: TASK OR SET NO.

PROJECT SITE LEADER: [redacted] PHONE NO. 304 738-7551

PROJECT SAMPLE COORDINATOR: [redacted] PHONE NO. 304 738-7551

SAS REQUEST (DETAILS REQUIRED)
(10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC (LOW/ MED/ HIGH)	SAMPLE PHASE (AQ/ SOL)	TYPE OF REQUEST (ORG.DIO OR INOR) SAS)	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	SAS REQUEST: LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIP'D	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
MS/MSD	LOW		INORG	MCLF63	ETS	9/29/93	X			X						
dupof MCLF62	↓		↓	MCLF64	↓	↓										
Field Blank	↓		↓	MCLF10	↓	↓										
Field Blank	↓		↓	MCLF98	↓	↓	X			X		X				

FINAL SAMPLING: YES ☐; NO ☐; FINAL SHIPPING DATE:
(14)

REVISION 02/90

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 20899

1. Project Code: 4231-10	Account Code:	2. Region No.: III	Sampling Co.: TetraTech	4. Date Shipped: 9.29.93	Carrier: Fed Ex
Regional Information:		(b) (4) [redacted]		Airbill Number: 057358 7862	
Non-Superfund Program:		(b) (4) [redacted]		5. Ship To: ETS Analytical Services 1401 Municipal Rd N.W Roanoke VA 24017 Attn: Susan Sheppard	
Site Name: Bishop Tube Co		4. Type of Activity: Lead / Pre-Remedial / Remedial / Removal			
City, State: Forrer, PA	Site Spill ID:	SF X; PRP; ST; FED	PA; SSI X; LSI	RIFS; RD; RA; O&M; NPLD	CLEM; REMA; REM; OIL; UST

6. Preservative (Enter in Column D): 1. HCl; 2. HNO3; 3. NaOH; 4. H_2SO_4; 5. $K_2CR_2O_7$; 6. Ice only; 7. Other (SAS) (Specify); N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water; 2. Ground Water; 3. Leachate; 4. Rinsate; 5. Soil/Sediment; 6. Oil (SAS); 7. Waste (SAS); 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp / Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. Nitrate/Nitrite	Low Conc. Fluoride	High pH	High Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Designated Field QC
MCLF98	3	L	G	2		X						31795 46	BSP-FB-01	9/29/93 0915	JAN	—	Field Blank

Shipment for Case complete? (Y/N): Y

Page 1 of 3

Sample used for a spike and/or duplicate:

Additional Sampler Signatures: (b) (4) [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature) (b) (4) [redacted]	Date / Time: 9/29/93 1800	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: [X] Accepted (b) (4) [redacted]; [ ] Declined

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

DISTRIBUTION:
Green - Region Copy Pink - SMO Copy White - Lab Copy Yellow - Lab Copy for Return to SMO

ORIGINAL (Red)

Inorg 1

T 019568

ORIGINAL (Red)

EPA — Inorganic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 20899

1. Project Code: 4231-10 | Account Code:
2. Region No.: III | Sampling Co.: Tetra Tech
4. Date Shipped: 9.29.93 | Carrier: Fed Ex
Regional Information: (b) (4) [redacted]
Airbill Number: 057358786 2
Non-Superfund Program:
5. Ship To: ETS Analytical Services, 1401 Municipal Rd. N.W, Roanoke, VA 24012, Attn: Susan Sheppard
Site Name: Bishop Tube Co
4. Type of Activity: SF (Lead) X; PRP; ST; FED; Pre-Remedial: PA; SSI X; LSI; Remedial: RIFS; RD; RA; O&M; NPLD; Removal: CLEM; REMA; REM; OIL; UST
City, State: Frazer, PA | Site Spill ID:

6. Preservative (Enter in Column D): 1. HCl; 2. HNO3; 3. NaOH; 4. H_2SO_4; 5. $K_2CR_2O_7$; 6. Ice only; 7. Other (SAS) (Specify); N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water; 2. Ground Water; 3. Leachate; 4. Rinsate; 5. Soil/Sediment; 6. Oil (SAS); 7. Waste (SAS); 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. Nitrate/ Nitrite	Low Conc. Fluoride	High pH	High Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Designated Field QC
MCLF54	2	L	G	2/3	X		X					3-1179531 / 3-1179532	BSP-MW-21	9/29/93 1530	GJD	CNA54	dup of MCLF52
MCLF49	2	L	G	2		X						3-1179533	BSP-MW-21	9/29/93 1530	GJD	—	dup of MCLF47
MCLF57	1	L	G	2/3	X		X					3-1179549 / 3-1179550	BSP-SW-01	9/29/93 1345	CAS	CNA57	
MCLF59	1	L	G	2/3	X		X					3-1179553 / 3-1179555	BSP-SW-02	9/29/93 1130	TJS	CNA59	
MCLF58	1	L	G	2/3	X		X					3-1179559 / 3-1179560	BSP-SW-03	9/29/93 0945	TJS	CNA58	
MCLF61	5	L	G	6	X		X					3-1179569	BSP-SED-01	9/29/93 1400	CAS	CNA61	
MCLF62	5	L	G	6	X		X					3-1179572	BSP-SED-02	9/29/93 1145	TJS	CNA62	
MCLF63	5	L	G	6	X		X					3-1179577 / 3-1179578	BSP-SED-03	9/29/93 1000	TJS	CNA63	MS/MSD
MCLF64	5	L	G	6	X		X					3-1179581	BSP-SED-04	9/29/93 1130	TJS	CNA64	dup of MCLF62
MCLF60	3	L	G	2/3	X		X					3-1179574 / 3-1179575	BSP-EB-01	9/29/93 0915	TJS	CNA60	field blank

Shipment for Case complete? (Y/N): Y
Page 2 of 3
Sample used for a spike and/or duplicate: MCLF63
(b) (4) [redacted]
Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(b) (4) [redacted]	9/29/93 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: [X] Accepted [ ] Deci
(b) (4) [redacted]

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

DISTRIBUTION:
Green - Region Copy Pink - SMO Copy White - Lab Copy Yellow - [illegible] opy for Return to SMO

Trans 1

019520

EPA — Inorganic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 20899

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
4231-10		III	TetraTech	9.29.93	Fed Ex

Regional Information: (b) (4) [redacted]

Airbill Number: 0573587862

Non-Superfund Program

5. Ship To: ETS Analytical Services, 140 Municipal Rd NW, Roanoke VA 24012, Attn: Susan Sheppard

Site Name: Bishop Tube Co

City, State: Frater, PA

Site Spill ID:

4. Type of Activity: SF (Lead) X; PRP; ST; FED; Pre-Remedial: PA, SSI X, LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (SAS) (Specify) N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. Nitrate/ Nitrite	Low Conc. Fluoride	High pH	High Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Designated Field QC
MCLF51	2	L	G	2/3	X		X					3-179504 + 3-179505	BSP·MW·01	9/29/93 1020	GJD	CNA51	
MCLF46	2	L	G	2		X						3-179506	BSP·MW·01	9/29/93 1020	GJD	—	
MCLF52	2	L	G	2/3	X		X					3-179510 + 3-179511	BSP·MW·02	9/29/93 1530	GJD	CNA52	
MCLF47	2	L	G	2		X						3-179512	BSP·MW·02	9/29/93 1530	GJD	—	
MCLF53	2	L	G	2/3	X		X					3-179523 thru 3-179525	BSP·MW·03	9/29/93 1620	GJD	CNA53	MS/MSD
MCLF48	2	L	G	2		X						3-179526 + 3-179527	BSP·MW·03	9/29/93 1620	GJD	—	MS/MSD
MCLF55	2	L	G	2/3	X		X					3-179537 + 3-179538	BSP·MW·15	9/29/93 1310	GJD	CNA55	
MCLF50	2	L	G	2		X						3-179539	BSP·MW·15	9/29/93 1310	GJD	—	
MCLF56	2	L	G	2/3	X		X					3-179540 + 3-179541	BSP·MW·16	9/29/93 1205	GJD	CNA56	
MCLF99	2	L	G	2		X						3-179542	BSP·MW·16	9/29/93 1205	GJD	—	

Shipment for Case complete? (Y/N)

Page 1 of 3

Sample used for a spike and/or duplicate: MCLF53 MCLF48

Additional Sampler Signatures: (b) (4) [redacted]

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(b) (4) [redacted]	9/29/93 1800	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: X Accepted (b) (4) [redacted]; ☐ Declined

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

DISTRIBUTION:
Green - Region Copy Pink - SMO Copy White - Lab Copy Yellow - Lab Copy for Return to SMO

Inorg 1

1 019596

PAGE 1 OF 1
(1)

EPA SAMPLE SHIPPING LOG

(REQUIRED FOR ALL SAMPLES SENT THROUGH THE CONTRACT LAB PROGRAM)

PROJECT SITE NAME: BISHOP TUBE CO. EPA PROJ. OFFICER: Mike Giuranna
RAS NO. 20899 SAS NO: TASK OR SET NO.
PROJECT SITE LEADER: [redacted] (b) (4) PHONE NO. (304) 738-7551
PROJECT SAMPLE COOR [redacted] PHONE NO. (304) 738-7551

SAS REQUEST (DETAILS REQUIRED)
(10)

QC SAMPLE INFORMATION AND/OR COMMENTS	CONC (LOW/ MED/ HIGH)	SAMPLE PHASE (AQ/ SOL)	TYPE OF REQUEST (ORG.DIO OR INOR) SAS)	EPA SAMPLE NO.	ORGANICS OR INORGANICS: LAB NAME	DATE SHIPPED	DATA RECEIVED (XX-OUT ITEMS NOT REQUESTED): VOA	BNA	PEST	TCDD	METALS	CN	SAS REQUEST: LAB NAME	SAS REQUEST (ITEMIZE)	DATE SHIP'D	DATA REC'D
(2)	(3)	(4)	(5)	(6)	(7)	(8)	←			(9)		→	(11)	(12)	(13)	
	LOW	AQ	ORG	CNA51	NYTEST	9/29/93										
		AQ		CNA 52												
MS/MSD		AQ		CNA 53												
		AQ		CNA 55												
		AQ		CNA 56												
dup of CNA52		AQ		CNA 54												
		AQ		CNA 57												
		AQ		CNA 59												
		AQ		CNA 58												
Field Blank		AQ		CNA 60												
Trip Blank		AQ		CNA 97												
		SOL		CNA 61												
		SOL		CNA 62												
MS/MSD		SOL		CNA 63												
dup of CNA62	↓	SOL	↓	CNA 64	↓	↓										

FINAL SAMPLING: YES [X]; NO [ ]; FINAL SHIPPING DATE: 9/29/93
(14)

REVISION 02/90

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 20899

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
4231.10		III	TetraTech	9.29.93	Fed Ex

Regional Information: (b) (4) [redacted]

Airbill Number: 057358785/

Non-Superfund Program

5. Ship To: NJ Test Environmental, 60 Seaview Blvd, Port Washington NJ 11050, Attn: Robert Fletcher

Site Name: Bishop Tube Co.

3. Type of Activity: SF (Lead) ☒, PRP, ST, FED; Pre-Remedial: PA, SSI ☒, LSI; Remedial: RIFS, RD, RA, O&M ☒, NPLD; Removal: CLEM, REMA, REM, OIL, UST

City, State: Frazer PA

Site Spill ID

6. Preservative (Enter in Column D): 1. HCl; 2. HNO3; 3. NaHSO4; 4. H2SO4; 5. Other (SAS) (Specify); 6. Ice only; N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water; 2. Ground Water; 3. Leachate; 4. Rinsate; 5. Soil/Sediment; 6. Oil (SAS); 7. Waste (SAS); 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp / Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/PCB	High ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Designated Field QC
CNA51	2	L	G	1	X				3-117950 thru 3-117953	BSP-MW-01	9/29/93 1020	GJD	MCLF51	—
CNA52	2	L	G	1	X				3-117949 thru 3-117950	BSP-MW-02	9/29/93 1530	GJD	MCLF52	
CNA53	2	L	G	1	X				3-117951 thru 3-117952	BSP-MW-03	9/29/93 1620	GJD	MCLF53	MS/MSD
CNA55	2	L	G	1	X				3-117952 thru 3-117956	BSP-MW-15	9/29/93 1310	GJD	MCLF55	
CNA56	2	L	G	1	X				3-117954 thru 3-117955	BSP-MW-16	9/29/93 1605	GJD	MCLF56	
CNA54	2	L	G	1	X				3-117952 thru 3-117953	BSP-MW-21	9/29/93 1530	GJD	MCLF54	dup of CNA52
CNA57	1	L	G	1	X				3-117954 thru 3-117955	BSP-SW-01	9/29/93 1315	CAS	MCLF57	
CNA59	1	L	G	1	X				3-117951 thru 3-117953	BSP-SW-02	9/29/93 1130	TJS	MCLF59	—
CNA58	1	L	G	1	X				3-117955 thru 3-117958	BSP-SW-03	9/29/93 0945	TJS	MCLF58	—
CNA60	3	L	G	1	X				3-117951 thru 3-117953	BSP-FB-01	9/29/93 0915	JAD	MCLF60	Field Blank

Shipment for Case complete? (Y/N): Y

Page 1 of 2

Sample used for a spike and/or duplicate: CNA53

Chain of Custody Seal Number: (b) (4) [redacted]

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(b) (4) [redacted]	9/29/93 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: ☒ Accepted, ☐ Declined

(b) (4) [redacted]

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

DISTRIBUTION:
Blue - Region Copy Pink - SMO Copy White - Lab Copy Yellow - Lab Copy for Return to SMO

Org 1

001/9542

EPA — Organic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 20899

DRIGINAL (Red)

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
4231-10		III	TetraTech	9-29-93	Fed Ex

Regional Information: (b) (4) [redacted]

Airbill Number: 0573587851

Non-Superfund Program

5. Ship To: NY Test Environmental Inc
60 Seaview Blvd
Port Washington NY 11050
Attn: Robert Fletcher

Site Name: Bishop Tube Co

City, State: Frazer, PA

Site Spill ID:

3. Type of Activity: SF (Lead) X; PRP; ST; FED; Pre-Remedial: PA; SSI; LSI; Remedial: RIFS; RD; RA; O&M X; NPLD; Removal: CLEM; REMA; REM; OIL; UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. $NaHSO_4$ 4. H_2SO_4 5. Other (SAS) (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/ PCB	High ARO/ TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Designated Field QC
CNA97	3	L	G	1	X				3-117953 thru 3-117954	BSP-TB-01	9/29/93 0915	JAO	—	trip blank
CNA61	5	L	G	6	X				3-117955 thru 3-117958	BSP-SED-01	9/29/93 1000	CAS	MCLF61	—
CNA62	5	L	G	6	X				3-117959 thru 3-117961	BSP-SED02	9/29/93 1145	TJS	MCLF62	—
CNA63	5	L	G	6	X				3-117962 thru 3-117965	BSP-SED-03	9/29/93 1000	TJS	MCLF63	MS/MSD
CNA64	5	L	G	6	X				3-117966 thru 3-117969	BSP-SED04	9/29/93 1145	TJS	MCLF64	dup of CNA62

Shipment for Case complete? (Y/N): Y

Page 1 of 2

Sample used for a spike and/or duplicate: CNA63

(b) (4) [redacted]

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(b) (4) [redacted]	9/29/93 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Sample: (b) (4) [redacted]

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

DISTRIBUTION:
Blue - Region Copy Pink - SMO Copy White - Lab Copy Yellow - La[illegible]py for Return to SMO

Org 1